

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/769,688	01/25/2001	Takashi Mochizuki	P/647-136	5364	
32172 7	7590 04/27/2006		EXAM	EXAMINER	
	SHAPIRO MORIN & O	KUMAR,	KUMAR, PANKAJ		
1177 AVENUI 41 ST FL.	1177 AVENUE OF THE AMERICAS (6TH AVENUE) 41 ST FL. NEW YORK, NY 10036-2714		ART UNIT	PAPER NUMBER	
NEW YORK,			2611		
			DATE MAILED: 04/27/2006	DATE MAILED: 04/27/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		122		0		
		Application No.	Applicant(s)			
		09/769,688	MOCHIZUKI, TAKAS	ЭНІ		
	Office Action Summary	Examiner	Art Unit			
		Pankaj Kumar	2611			
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence addre	9SS		
WHIC - Exter after - If NO - Failu Any I	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING D. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. o period for reply is specified above, the maximum statutory period of the reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this comm D (35 U.S.C. § 133).	·		
Status						
	Responsive to communication(s) filed on 14 For This action is FINAL . 2b) This Since this application is in condition for alloward closed in accordance with the practice under Exercise 1.	action is non-final. nce except for formal matters, pro		nerits is		
Dienoeiti	ion of Claims					
5)⊠ 6)⊠ 7)⊠ 8)⊟ Applicat i 9)⊟ 10)⊟	Claim(s) 1-10 is/are pending in the application 4a) Of the above claim(s) is/are withdraw Claim(s) 3 and 4 is/are allowed. Claim(s) 1 and 7 is/are rejected. Claim(s) 2, 5, 6, 8, 9, 10 is/are objected to. Claim(s) are subject to restriction and/or ion Papers The specification is objected to by the Examine The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine Replacement drawing sheet(s) including the correct Theorem Replacement drawing sheet(s) including the	wn from consideration. r election requirement. er. epted or b) objected to by the lidrawing(s) be held in abeyance. Section is required if the drawing(s) is objected to by the lidrawing(s) is objected.	e 37 CFR 1.85(a). ejected to. See 37 CFR			
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachmen	t(s)			•		
1) Notic 2) Notic 3) Inforr	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate	52)		

Application/Control Number: 09/769,688

Art Unit: 2611

DETAILED ACTION

Page 2

Response to Arguments

- 1. Applicant's arguments filed 2/14/2006 have been fully considered but they are not persuasive.
- 2. Applicant agrees on page 3 4th paragraph that "In Maniwa, there are coefficients applied to minimize intermodulation distortion. However, these two coefficients ...". Hence applicant agrees that Maniwa teaches two coefficients.
- 3. Applicant goes on to write that these two coefficients do not provide the explicitly recited first and second attenuation amounts since (as per applicant's arguments on page 3) in Maniwa, 25 (a set of alpha and beta) affecting attenuation amount in 50 and 24 affecting 23 do not correspond to first and second attenuation amount since Maniwa is controlling the attenuation so that the sum of the attenuation amount outside the band in each of the predistorter 50 and transmitter 23 becomes a constant amount. This is not persuasive. What applicant has claimed is that there are two attenuation amounts. The fact that Maniwa has two attenuation amounts which applicant acknowledges are summed, means that Maniwa has two attenuation amounts first and second attenuation amounts. The fact that Maniwa teaches two attenuation amounts and in fact, it supports the fact that Maniwa teaches two attenuation amounts. The fact that Maniwa teaches two attenuation amounts and in fact, it supports the fact that Maniwa teaches two attenuation to a constant amount in Maniwa does not negate the fact that Maniwa teaches two attenuation amounts and in fact, it supports the fact that Maniwa teaches two attenuation amounts and in fact, it supports the fact that Maniwa teaches two attenuation amounts and in fact, it supports the fact

Art Unit: 2611

- 4. Applicant argues that the office action notes that this feature is not sufficiently disclosed in Maniwa. This is not persuasive. The office action did not note that this feature is not sufficiently disclosed in Maniwa. In fact, the office believes that this feature is sufficiently disclosed in Maniwa. However, if one were to not agree, then the office is providing another reference to teach the limitation.
- 5. Applicant argues on page 4 that "according to the present invention, the attenuation amount is selected in accordance with the use or nonuse situation of the adjacent band". This is not persuasive since applicant has not claimed this limitation.
- Applicant argues that descriptions relevant to the portions of cols. 1 (lines 13-15), 7 (line 54) to 8 (line 4) of Maniwa cited in the action is not seen. This is not persuasive. Col. 1 lines 13-15 recites "low adjacent-channel leakage power" which is related to applicant's claim of reducing leakage power outside a transmission signal band (Maniwa's channel adjacent to the transmission channel is adjacent or outside the transmission channel or band). Cols. 7 and 8 of Maniwa refer to subtracting portion of fft, two tones, alpha and beta coefficients varying which all relate to applicant's claim of filtering and adjustable filtering.
- 7. Applicant's argument with respect to the Beamish reference is irrelevant to applicant's claim and to what the prior action discussed with respect to the Beamish reference. The Beamish reference teaches the limitations as taught in the prior action.
- 8. Applicant argues that motivation to combine references was not provided. This is not persuasive. Page 4 of the prior action recited "one of ordinary skill in the art, would have been motivated to combine the teachings of Maniwa with Akiya because Maniwa suggests adjusting coefficients (Maniwa alpha, beta) for use in restricting a frequency band (Maniwa figs. 7,8) and

Art Unit: 2611

hence adjusting attenuation (something broad) in general and Akiya suggests the beneficial use of adjusting attenuation by switching between two sets of values such as providing extra gain to compensate for power reduction (Akiya col. 1 lines 37-43) in the analogous art of attenuation." Page 4 also recited "one of ordinary skill in the art, would have been motivated to combine the teachings of Maniwa with Beamish because Maniwa suggests transmission, predistortion, and adjusting coefficients (Maniwa alpha, beta) for use in restricting a frequency band (Maniwa figs. 7,8) and hence filtering (something broad) in general and Beamish suggests the beneficial use of modulating and filtering for transmission such as removing higher order harmonics in order to avoid transmitting out of band energy (Beamish col. 2 lines 49-52) in the analogous art of transmission."

Response to Amendment

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 1, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maniwa USPN 6,275,103 in view of Akiya USPN 5,752,171 and Beamish USPN 6,865,216. See prior action for details.

Application/Control Number: 09/769,688 Page 5

Art Unit: 2611

Allowable Subject Matter

11. Claims 3-4 are allowed. See a prior action for details.

12. Claims 2, 5, 6, 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

- 13. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- 14. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 09/769,688

Art Unit: 2611

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (571) 272-3011. The examiner can normally be reached on Mon, Tues, Thurs and Fri after 8AM to after 6:30PM.

- 16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- 17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pankaj Kumar Patent Examiner Art Unit 2611 Page 6

PK